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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/490,979	01/24/2000	Timothy J. Wilsom	CM01730G	7879

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MOTOROLA, INC.  
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SCHAUMBURG, IL 60196

EXAMINER
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HA, DAC V

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 11/10/2003 6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/490,979

Applicant(s)

WILSON, TIMOTHY J.

Examiner

Dac V. Ha

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-4, 13-17** are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashi et al. (US 6,404,778) (hereinafter as Hayashi).

**Regarding claim 1**, Hayashi teaches the claimed subject matter as followed.

“transmitting a downlink signal burst from the base transceiver station to the mobile unit, the downlink signal burst containing a selected number of bits having a first time length” (Figures 3, 5, 7, elements 320, 1420, 2320, respectively; Col. 6, lines 3-5, 9; Col. 8, line 67 to Col. 9, line 1; Col. 12, lines 66-67);

“transmitting an uplink signal burst from the mobile unit to the base transceiver station, the uplink signal burst containing the selected number of bits having a second time length” (Figures 3, 5, 7, elements 310, 1410, 2310, respectively; Col. 6, lines 3-5, 7, 14-15; Col. 8, lines 64-65; Col. 9, line 8; Col. 12, lines 64-65; Col. 13, lines 2-4);

“wherein the first time length is shorter than the second time length thereby providing a guard time” (Col. 6, line 27; Col. 9, line 22; Col. 13, line 29).

**Regarding claim 13**, see claim 1 above.

**Regarding claim 2**, Hayashi further implies the teaching of the claimed subject matter "wherein the guard time is sufficient for the mobile unit to switch from transmit to receive mode" in Col. 2, lines 1-3; Col. 6, lines 27-29.

**Regarding claim 14**, see claim 2 above.

**Regarding claim 3**, Hayashi further teaches the claimed subject matter:

"forming the downlink signal burst using a first modulation technique" (Col. 13, lines 5-18), wherein the "first modulation technique" is, i.e., QPSK;

"forming the uplink signal burst using a second modulation technique" (Col. 13, lines 5-18), wherein the "second modulation technique" is, i.e., BPSK.

**Regarding claims 15, 16**, see claim 3 above.

**Regarding claim 4**, Hayashi further teaches the claimed subject matter "wherein the first modulation technique has a higher-order than the second modulation technique" in Col. 13, lines 5-18.

**Regarding claim 17**, see claim 4 above.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 5-12, 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi.

**Regarding claims 5-10**, these claimed subject matter would have been obvious to a person of ordinary skill in the art as optional. That is, Hayashi only shows two types of modulation techniques, as an example, a person of ordinary skill in the art would have realized that any other suitable modulation technique could also be used as desired.

**Regarding claims 11-12**, these claimed subject matter would have been obvious to a person of ordinary skill in the art as optional. That is, Hayashi does not limit the burst length and the guard time to any particular length, therefore, a person of skilled in the art would have realized that the specific length of the burst and the guard time would have been design specific.

**Regarding claims 18-20**, see reasoning in claims 5-12 above.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Scott (US 6,366,566) discloses an Efficient Communication System Using Time Division Multiplexing And Timing Adjustment Control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 703-306-5536. The examiner can normally be reached on 5/4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-5500.

A handwritten signature in black ink, appearing to read 'Dac V. Ha', written over a horizontal line.

Dac V. Ha  
Examiner  
Art Unit 2634